Amendments to the Claims:

COPY

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of claims:

1. (currently amended) A method for treating a neurodegenerative disease in a mammal, comprising administering to said mammal in need of such treatment an agent which will inhibit and/or reverse ADP-ribosylation of elongation factor-2 (EF-2) in neuronal cells thereof, whereby neuron degeneration is ameliorated.

2. (withdrawn) The method of claim 1, wherein said agent comprises nicotinamide or an analog of nicotinamide.

3. (original) The method of claim 1, wherein the agent is administered by aerosol to the nasal passages, orally, or by injection.

4. (original) The method of claim 1, wherein the mammal is a human.

5. (currently amended) The method of claim 1, wherein said agent is a vaccine composition containing diphtheria toxoid and a pharmaceutically acceptable carrier.

6. (original) The method of claim 5, wherein the vaccine is administered by spray or aerosol to the nasal passages.

7. (original) The method of claim 5, wherein the dosage of vaccine is comparable to a typical booster vaccine.

8. (original) The method of claim 5, wherein the vaccine contain an adjuvant.

9. (withdrawn) The method of claim 1, wherein the agent is antitoxin to C. *diphtheria* exotoxin, which is administered as passive immunotherapy.

10. (withdrawn) The method of claim 9, wherein the antitoxin is purified antibody to diphtheria toxin.

11. (withdrawn) The method of claim 9, wherein the antitoxin is a monoclonal antibody.

12. (withdrawn) The method of claim 11, wherein the antibody is a variable region fragment thereof.

13. (withdrawn) The method of claim 11, wherein the antitoxin is an antibody which has an increased affinity for ETA or DT as compared to its wildtype counterpart.

14. (withdrawn) The method of claim 13, wherein the antibody is a single chain Fv antibody.

15. (withdrawn) A method for determining if an agent is useful for treating a neurodegenerative disease, comprising:

(a) performing a eucaryotic in vitro translation assay, to which has been added nucleic acid that codes for a marker protein, diphtheria toxin or exotoxin A, and the agent to be tested; and

(b) determining if the inhibition of translation by the toxin is blocked by the agent by measuring the marker protein produced;

wherein if translation is not blocked, then the agent is effective as a treatment for neurodegenerative disease.

16. (withdrawn) The method of claim 15, wherein the neurodegenerative disease is Alzheimer's Disease.

17. (withdrawn) The method of claim 15, wherein the marker protein is an enzyme.

18. (withdrawn) The method of claim 17, wherein the enzyme is luciferase.

19. (withdrawn) The method of claim 15, wherein the marker protein is green fluorescent protein.

20. (withdrawn) An agent effective in preventing inhibition of translation by diphtheria toxin or exotoxin A as determined by the method of claim 15.

21. (withdrawn) A method for determining if an agent is useful for treating a neurodegenerative disease, comprising:

(a) adding to a cell culture that has been transfected with a vector that expresses a marker protein an amount of diphtheria toxin which will inhibit translation, and the agent to be tested;

(b) determining if the inhibition of translation by the toxin is blocked by the agent by measuring the marker protein produced;

wherein if translation is not blocked, then the agent is effective as a treatment for neurodegenerative disease.

22. (withdrawn) The method of claim 21, wherein the neurodegenerative disease is Alzheimer's Disease.

23. (withdrawn) The method of claim 21, wherein the cell culture contains neuroblastoma cells.

24. (withdrawn) The method of claim 21, wherein the marker protein is an enzyme.

25. (withdrawn) The method of claim 24, wherein the enzyme is luciferase.

26. (withdrawn) The method of claim 21, wherein the marker protein is green fluorescent protein.